Four Corners Air Quality Task Force Meeting Power Plant Work Group Wed., August 9, 2006

Attendees:

Mark Jones, NMED; Susan Johnson, NPS, Ted Orf, Orf & Orf; Mark McMillan, CDPHE; Jack Schuenemeyer, SW Statistical Consulting; Jeff Robinson, USEPA6; Thomas Munro, Durango Herald; Sug McNall, Citizen; Lee Conger, LWV; Joel Farrell, BLM Farmington; Mike Farley, PNM; Pat Cummins, WRAP;, Nathan Plagens & Dirk Straussfeld, Sithe Global; Gus Eghneim, Wood Group Power Operations; Richard Grimes, APS

Marylin Brown, Dave Ruger, Carla Sontag were unable to make it.

Mark reviewed the workgroup charter. There were no comments or questions.

Follow-up questions for Mark McMillan regarding his mercury presentation: Q: An unnamed US representative said in public meeting that all mercury is coming from China; is this true? A: China is a large source of mercury—lot of uncontrolled sources. Q: Any reasonable estimate about how much is local vs global? A: some work has shown air deposition in general is very significant contributor; not known from where. Comment: high chlorine coal (Eastern) emits more ionic mercury—more prone to local deposition. Western coal emits elemental mercury, which is less prone to local deposition (more prone to joining the "global pool"). EPA and EPRI material supports these presumptions. Mark concurred and noted that transport pattern of reactive species is unknown. Once it's in the global pool, it can stay up for a long time—months or years; hot spots are function of global pool and local sources, grasshopper effect (see Mesa Verde handout on mercury) also happens. Power Plant emissions are very small portion of global pool, although EPA has recognized sector as biggest man-made contributor in the U.S. Q: Are there hot spots in Colorado? A: Fish advisories are what we have that could indicate hot spots. Q: what accounts for the Mesa Verde variability? A: May be some measurement area, but also fluxes in global pool and local sources, and weather can influence variability. Monitors at lower elevation, like in Cortez, might see very different readings. Comment: The Clean Air Mercury Rule (CAMR) has been challenged—court may overturn regulation, and state plans could go back to the drawing board. Some states are looking at state-only rules, which would remain in effect. A mercury mitigation option could address state-only plans, as well as monitoring of dry deposition of mercury.

Sithe Global Presentation on Desert Rock Energy Project

Summary/Steps to Air Permit Slides:

Started permitting process 9/03; tried to communicate early on with many groups regarding air emissions. Company felt they acted with due diligence regarding class I areas—before entering into contract with DINE Power Development Corporation, they

met with EPA and others. It came out early on that they needed to squeeze technologies to limits to reduce emissions. These would be the lowest emissions ever permitted for this type of technology. Active discussions have continued with EPA and Federal Land Managers (FLMs) and enviro. groups. The draft permit is out, workshops (9-12, 13 and 14?), one public hearing to be held (Shiprock, Oct. 4). Oct 27 is end of public comment period (this is longer than normal). Permit may be issued 1/07.

Air Permit slide

Air Permit-Mitigation slide: Company has had a lot of discussions with FLMs. Even though emissions are small, every amount adds some. However, because reductions have occurred in other facilities, emissions in area will be lower even with the facility. Company has made a tentative mitigation agreement with the FLMs: to invest in capital improvement project in area and to reduce SO2 emissions by 3850 tons. If no project found, they with buy into acid rain marketing program—for every one ton emitted, 2 tons will be bought (local area). The company is working to find a way to make the mitigation agreement enforceable (even though it's a voluntary commitment), potentially through the Navajo Nation's operating permit. Nothing in mitigation plan regarding NOx (not a visibility issue anyway?), except if SO2 reductions can't be found, 3 tons of NOx would be substituted for each 1 ton of SO2.

EPA's initial assessment is that proposed project will not violate any increment or NAAQS. Company stated that EPA felt reasonably good about issuing this because of reductions occurring in area. No issues with respect to acid deposition in class I area have been raised.

The company showed the relative contributions of their facility and 4CPP and SJPP.

Comments: In the EIS, the contractor could rely on permit application for information as well as public comments to do AQ evaluation. Q: Could mitigation measures be in EIS? A: In company's opinion, there will be no adverse impact given reductions occurring. However, they are willing to make the agreement enforceable and will work with regulatory agencies to make this happen. None of this needs to be in the EIS. Mark—we're drafting mitigation options now, some of these might require funding for implementation. Could the money for environmental projects be for this purpose? A: Company wants to make sure it would go to real projects, not studies--would want tangible results—some improvement, reductions generated.

The EIS--done by BIA since the facility is on Indian land—is a lengthy public process that looks at environmental impacts and potential mitigation measures. Draft EIA probably November (updated from handout Mark handed out), and hearings will be held. On the Power Plant workgroup website, there is a link to a Desert Rock site, EIS process, and EPA9 draft air permit link.

<u>Mitigation Options</u>: Mark went over mitigation option development outline and timeline, he wants a follow-up call in a couple of weeks. We will need draft mitigation option papers by Friday, Sept. 8.

The group reviewed the Mitigation Option Brainstorm List to choose options to draft and to choose drafting teams.

- 1. EE/Renewable energy credits: Mark would like to defer this one for last round.
- 2. IGCC: (for new power plants), defer to last round. Mark McMillan encourages utility folks to weigh in on control technology options in general.
- 3. CEMs—Dave Ruger, Honeywell, will take the lead on this. Mark will help. This is more process control ("neuronetwork"). Mike Farley will get contact from SJGS to help. CAMR will require mercury CEMs, but there are other issues as well. Do we want separate CEM option?
- 4. CAMR—Mark and Mark M. and Andy from NM will work on concepts of rule, or additional studies (additions to state rules?)
- 5. BART/Regional haze—add with #17. Mark intended that co-control (mercury) was the original point of #5. Susan will do #17, with help from Mark M. Mark will look for other help.
- 6. Renewable Energy Portfolios: postpone for last round
- 7. CO2 control—option might be to suggest power plants to look for ways to reduce? Note EPA's recent report on IGCC and associated costs. Applies to both existing and new. Sequestration is cheap, capturing is not. Flue gas is 8-12% CO2. Mark J. will take the lead and coordinate with NM climate change advisory group. Jeff Robinson to provide info from EPA.
- 8. Air deposition studies—applies to all pollutants. Dr. Koren Nydick, Mtn research institute will be contacted by Mark J?. Susan and Jack S. will help. Jeffrey Robinson will also help
- 9. NM CCAG- combined with 7. Mark will follow up.
- 10. CAIR—combine with 16.
- 11. Advanced NOx control technologies: Mark will followup with NM, Susan will look at.
- 12. Energy efficiency
- 13. Harmonization of standards—Marilyn Brown started drafting, needs help
- 14. Energy conservation—Marilyn Brown started drafting, needs help

The group ran out of time to finish considering the list. Let Mark know by email if interested in being involved in any of these.

xx. option to be written on Asthma studies / health studies (S. McNall to help draft)

<u>Miscellaneous</u>: Regarding cross over issues (which are brought to our attention by other workgroups), we have three options: reference as is in our workgroup section, draft differing opinions, or expand/edit. Mark wants team for this category.

Mark will put out an email with teams/leads. Brainstorm list will be left open. Next conference call in 2 weeks . Back to once/month schedule after that. Next meeting is Nov 8 in Farmington.